



## Abstracting/Extending

Finding and explaining general patterns or themes  
(7 of 13 thinking/reasoning skill processes)

### Creating a Performance Task

**Step 1:** Identify a content standard to be taught.

**Step 2:** Select thinking/reasoning skill processes.

**Step 3:** Write a 1<sup>st</sup> draft of the task incorporating steps 1 and 2.

**Step 4:** Identify standards from Learner Performance goals (LLL) to be included and revise task to make these standards explicit.

**Step 5:** Identify what kind of product/performance will be produced, add it to the performance task description.

### Teaching a Thinking Skill

- ☐ Introduce skill, give several examples, and discuss its performance (when, where, how to use it).
- ☐ Explain mental processes to do the thinking, model the process.
- ☐ Let students practice the skill several times using personal, easy to understand content.
- ☐ Put the skill into the context of your academic content.
- ☐ Model, model, model!

### Questions the Process Helps Explore

- ☐ What is the general pattern of information?
- ☐ Where else does this apply?
- ☐ How can the information be represented in another way (graphically, symbolically)?
- ☐ What is important here?
- ☐ How can I say the same thing in a more general way?

### Steps in the Process

1. Identify what is considered important or basic to the information or situation with which you are working.
2. Write the basic information in a more general form by:
  - ☐ Replacing words referring to specific things with words referring to more general things.
  - ☐ Summarizing information where ever possible.
3. Find new information or a situation where the general pattern applies.

### Optional Graphic Organizers

Literal	Abstract	Literal

The literal patterns of the two items being associated are listed in the two outside panels. The abstract pattern that connects them is listed in the middle panel.

#### Checklist

- ☐ What is important here?
- ☐ How can I say the same thing in a different way?
- ☐ What else has the same general form?

### Example

Students are presented the major parts and functions of the central nervous system, and then asked to describe the general pattern and identify another system that has parts and functions.